## RITRON, INC.

## **TECHNICAL BULLETIN**

Publication No. 14560029

10/01

## SST-454 TRUNKING / DQC DECODE

As the result of a factory programming error, the SST-454 handheld radio receiver may have trouble decoding digital tone signals at a high FM deviation level. This is particularly troublesome when handshaking on LTR or PassPort trunking systems, causing slow or unreliable system connect.

To correct this problem the SST-454 must be programmed using terminal mode on the Plus Series PC Programmer software. The following instructions will optimize the SST-454 receiver to decode incoming digital tone signals at 1000 Hz FM deviation on channels programmed for wide band operation, and at 700 Hz FM deviation on channels programmed for narrow band operation.

- 1. Launch the Plus Series Programmer software.
- 2. Turn on the SST-454 radio and connect it to the programming cable via the 3.5mm jack.
- 3. From the **Radio** menu on the programmer Main screen, select the **Read Radio** menu item.
- 4. After reading the radio, check the <u>Radio Model</u> box to determine that the radio is a wide or narrow band model. Narrow band models will have a "-N" suffix. This indicates that the SST-454 receiver has been optimized for narrow band operation. All SST-454 radio models are capable of wide or narrow band transmitter operation.
- 5. From the **Radio** menu on the programmer Main screen, select the **Terminal Mode** menu item.
- 6. Once the <u>Terminal Mode</u> screen is open, type in a series of "?' characters followed by a "V". If the radio has been successfully placed into terminal program mode, the firmware revision will appear on the screen after the "V" character has been typed.
- 7. For wide band models that do not have the "-N" suffix, type \*02065D3524 followed by the ENTER key. For narrow band models with the "-N" suffix, type \*02065D6046 followed by the ENTER key.
- 8. De-select the **Terminal Mode** menu item from the **Radio** menu to return to the Main screen.

## TO ACHIEVE MAXIMUM RADIO PERFORMANCE FOR A SPECIFIC SYSTEM:

The SST-454 can be programmed for optimum decoding at the system's output FM deviation of the digital tone signals. Refer to the following chart to match the programming code to the systems output tone deviation.

	System Tone Deviation (Hz)									
	<u>500</u>	<u>600</u>	<u>700</u>	<u>800</u>	<u>900</u>	<u>1000</u>	<u>1100</u>	<u>1200</u>	<u>1300</u>	<u>1400</u>
SST-454	18	1E	24	2A	2F	35	3B	40	46	4C
SST-454-N	35	3D	46	4F	57	60	69	71	7 <b>A</b>	83

To program the radio to match the system, follow steps 1 through 6 above and then:

If the system is wide band, type \*02065D then the 2-digit code followed by the ENTER key. If the system is narrow band, type \*02065E then the 2-digit code followed by the ENTER key.